



Empirical Research on the Formation Mechanism of User Stickiness based on Professionalism of Broadcasters on Live video Streaming Platforms

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Abstract

User stickiness is crucial to the growth of live video streaming platforms. The broadcaster is the most important individual in a live video platform, and this study explores the formation mechanism of user stickiness based on the professionalism of the broadcasters. An online survey was conducted in the WeChat and QQ groups to evaluate the research model, yielding 202 usable questionnaires. The model was then examined using structural equation modeling. We have found that the professionalism of the broadcaster can generate broadcaster identification and perceived value, both of which can further produce user stickiness. In addition, we also found that broadcaster identification has a facilitating effect on perceived value. Exploring the formation mechanism of user stickiness on live video streaming platforms can provide important practical guidance for managers of the platforms.

Keywords: *live video streaming platform; user stickiness; professionalism of the broadcasters; broadcaster identification; perceived value*

1. Introduction

In recent years, live streaming has become increasingly popular in China. Compared to the traditional passive viewing of content, users can choose their own live content on live streaming platforms, so watching live streaming has become a more popular way for the majority of users [1]. Live video streaming platforms offer customers not only smoother viewing experience, but also create more opportunities for social interaction and self-expression. Live streaming platforms are a special kind of online content community, on this platform, users can generate, share and view video content, and interact socially, share ideas, exchange experiences and build and develop relationships through a range of technological tools provided by the platform. Generally speaking, the commonly understood video website refers to the online media where Internet users can browse video works online with perfect Internet technical support, while the live video streaming platform is different from the traditional video website, which has the following 3 characteristics. Firstly, user-generated content is dominant; secondly, interactivity and sociality; and thirdly, the formation of a community culture [2].

Loyalty has always been one of the central concepts of marketing research. Customer loyalty is a deep commitment to a preferred company or brand that leads to repeated purchases of the same company, brand or range of products and services. Many scholars use concepts such as continued intention to use or continued intention to follow to measure user loyalty in terms of a user's willingness to continue using an online platform, and this continued usage behavior can be referred to as user stickiness [3]. The broadcaster is the most important individual among the users and his or her professionalism determines the willingness of other users to watch the broadcast. The greater the professionalism of the broadcaster, the greater the gain for the user and therefore the higher the perceived value, and based on the value of use, user stickiness is created.

2. Hypotheses and research Model

2.1. Professionalism of broadcaster, broadcaster identification and perceived value

Powers can be divided into formal powers and individual rights, with individual rights being the most effective basis. Individual rights in the context of live

video streaming platforms refer to expert power, i.e. the influence generated by the broadcaster's expertise, special skills or knowledge [4]. The users' identification of the broadcaster's professionalism gives the broadcaster expert power and therefore further individual identification by the users. As work becomes increasingly professional, we are also increasingly reliant on a variety of professionals to achieve our goals. The main purpose for users to participate in live video streaming platforms is to get relevant information efficiently, so the more professional the broadcasters are, the more they can meet the users' needs for using the platform. At the same time, users feel a greater sense of reward because their trust in the broadcaster reduces their psychological risk and they trust the information relayed by the broadcaster more. Therefore, we hypothesize the following:

H1: Professionalism of broadcaster is positively associated with broadcaster identification.

H2: Professionalism of broadcaster is positively associated with perceived value

H3: Broadcaster identification is positively associated with perceived value

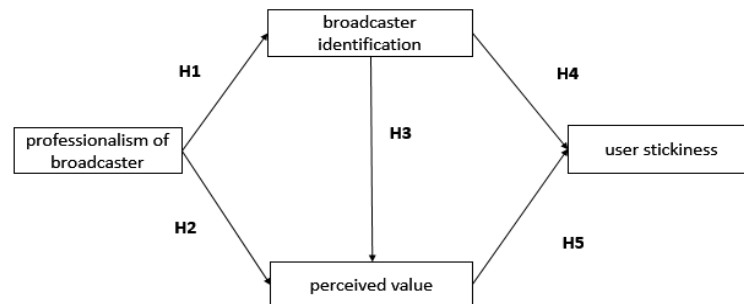


Figure 1. Research Model

3. Research methodology

step1: For this study, we acquired permission from managers to provide a link to the online survey. The data was collected over the course of two months, getting 202 valid responses. The participants' demographic statistics are presented in Table 1.

Step2: Each item from scales was changed from scales checked in past research. Each item was estimated by members' reactions to inquiries on a five-point Likert-type scale going from 1 (firmly dissent) to 5 (emphatically concur). Each item and its standard loading is shown on Table 2. AMOS 21.0 and SPSS

2.2. Broadcaster identification, perceived value and user stickiness

Based on a psychological perspective, the user's individual identification with the broadcaster can enhance the intention to maintain a long-term relationship due to the role model effect [5]. Based on a use-value satisfaction perspective, the more value users feel they have received, the more likely they are to continue using platform [6].

H4: Broadcaster identification is positively associated with user stickiness

H5: Perceived value is positively associated with user stickiness

2.3. Research model

This study reveals the formation mechanism of user stickiness based on professionalism of broadcasters on live video streaming platforms. We have constructed a path analysis model, which is presented in Figure 1.

22.0 were utilized to test the exploration model introduced in Figure 1.

4. Results

4.1. Measurement model

The indicators of the measurement model are good ($\chi^2/df = 1.709$, GFI = 0.901, AGFI = 0.858, CFI = 0.970, TLI = 0.965, RMSEA = 0.059), all values are within acceptable limits; Cronbach's α ranges from 0.821 to 0.931, which significantly exceeds the threshold of 0.7, so we can conclude that the legitimacy of this research is adequate.

Table 1. Demographic information.

Variables	Items	(%)
Gender	Male	13.9%
	Female	86.1%
Education level	High school education and below	53.0%

Age	Bachelor Degree	43.6%
	Graduate degree	3.4%
	< 20	2.5%
	21–25	1.0%
	26–30	1.5%
	31–35	3.5%
	> 35	91.6%

4.2. Structural Model

All overall-fit indices of the structural model are good: $\chi^2/df = 2.331$, GFI = 0.849, AGFI = 0.805, CFI =

0.938, TLI = 0.928, RMSEA = 0.080, all values are within acceptable limits. All hypotheses are supported, and the results are shown in Figure 2.

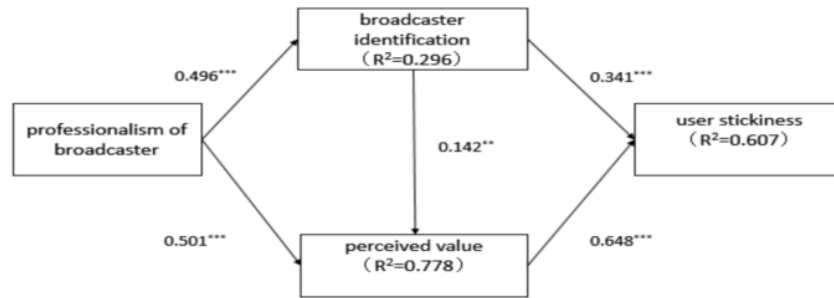


Figure 2. Model testing results. Notes: ** p < 0.01; *** p < 0.001.

4.3. Mediation Effects

The multiple mediation model is shown in Figure 3. The bootstrapping was used to examine multiple

mediation model using AMOS 21.0. Mediation effects are displayed in Table 3, because 0 does not happen between the lower and upper limits, suggesting all indirect effects are significant.

Table 2. Items and standard loadings

Variables	Items	Standard Loadings	Cronbach ' s α
professionalism of broadcaster	The broadcaster is very knowledgeable	0.926	0.931
	The broadcaster is well organized	0.824	
	The broadcaster has great expertise	0.920	
	The broadcaster has a lot of management experience	0.850	
perceived value	The platform can provide some special information	0.637	0.904
	The platform can provide some valid information	0.830	
	Some unique information is available within the platform	0.836	
	The platform group can provide some accurate information	0.838	
	Some full information is available in the platform	0.842	
	Overall, the platform can provide exclusive information.	0.766	
Broadcaster identification	I feel like I've been insulted when someone criticizes the broadcaster	0.784	0.821
	I feel like I've done it myself when the broadcaster successfully completes something	0.764	
	When someone praises the broadcaster, I feel like I've been praised	0.919	
	I would be embarrassed if there was a negative message from the broadcaster	0.560	
User stickiness	I am willing to spend more time when browsing this platform	0.849	0.924
	I often take the time to read the information posted by this platform	0.785	
	I plan to extend the time I follow and browse this platform	0.829	
	I visit this platform almost every day to see what is posted	0.807	
	When I go online, I habitually search for new information posted by this platform	0.857	
	I will visit this platform frequently	0.799	

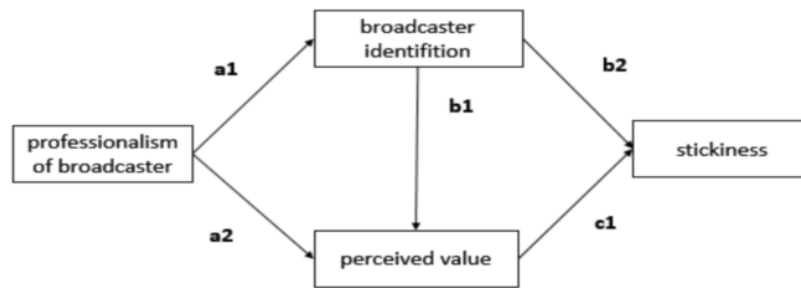


Figure 3. Mediation effect model.

Table 3. Indirect effects of professionalism of broadcaster on user stickiness through broadcaster identification and perceived value

	Point estimate	Product of Coefficients		Bootstrapping BC 95% CI	
		SE	Z	Lower limit	Upper limit
a1*b2	0.169	0.056	3.017	0.080	0.304
a1*b1 *c1	0.046	0.018	2.556	0.017	0.093
a2*c1	0.325	0.061	5.328	0.211	0.452

5. Conclusion

The purpose of this study is to clarify the mechanisms of user stickiness based on professionalism of broadcasters on live video streaming platforms. In the structural model, the R² value for user stickiness was 0.607. It can thus be seen that the model in this study was able to explain 70.2% of the user stickiness. This not only indicates that the path model in this study can well explain the formation mechanism of user stickiness on live video streaming platforms, but also suggests that broadcaster identification and perceived value are mediating variables that have a significant impact on the formation of user stickiness on live video streaming platforms. Professionalism of broadcaster directly cultivates broadcaster identification and perceived value, broadcaster identification can elicit perceived value, and user stickiness arises through the mediating effects of broadcaster identification and perceived value.

This study provides guidance for managers of live video streaming platforms in understanding user stickiness. The logical starting point of the user stickiness formation mechanism is the professionalism of the broadcaster, so the manager should strive to improve the professionalism of the broadcaster, for example, through online questionnaires for users to evaluate the broadcaster, according to user evaluation the manager can target to ask the broadcaster to improve their own shortcomings, so as to achieve the purpose of sustainable development of live video streaming platforms.

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